

Applicant : Gil Weigand et al.  
 Serial No. : 10/090,727  
 Filed : March 6, 2002  
 Page : 2 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

### Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

### Listing of Claims:

1. (Currently Amended) A method of streaming data units to terminals, the method comprising:
  - using a duplicating switch to receive communications;
  - using the duplicating switch to selectively filter the communications;
  - receiving a received stream of data units at the duplicating switch, wherein the received stream is addressed to a unicast address associated with the duplicating switch and the data units include a payload portion and an attribute portion;
  - ~~using the duplicating switch to receive a first stream of data units that are addressed to a unicast address on the duplicating switch, wherein the first stream of data units includes a payload portion and an attribute portion;~~
  - using the duplicating switch to store content from the payload portion of the received first stream;
  - using the duplicating switch to generate forwarded second streams that incorporate the stored content for use by two or more terminals having addressing information that was not part of the received first stream; and
  - ~~using the duplicating switch to make the second streams available to the terminals, wherein the duplicating switch is configured to duplicate one or more portions of the first stream~~
  - in response to a request received at the duplicating switch, using the duplicating switch to forward the forwarded streams that incorporates the content a duplicated payload portion of the data unit within the second streams of data units addressed to a unicast address on each of the two or more terminals, with each forwarded stream being forwarded to a unicast address,

Applicant : Gil Weigand et al.  
Serial No. : 10/090,727  
Filed : March 6, 2002  
Page : 3 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

wherein the duplicating switch is structured and arranged to selectively filter the communications and forward the forwarded streams-duplicated portion based on address information sent in the request to the duplicating switch in response to examining an address.

2. (Original) The method of claim 1 wherein using the duplicating switch to store content includes storing content that is temporally related to the data units that are being generated.

3. (Currently Amended) The method of claim 1 further comprising using a location identifier to indicate which portion of content is being generated into the forwarded second streams.

4. (Original) The method of claim 3 further comprising using location identifiers to access the content time-shifted as two different streams.

5. (Original) The method of claim 1 wherein using the duplicating switch to store content includes storing more than one instance of the same portion of content.

6. (Currently Amended) The method of claim 5 wherein using the duplicating switch to store content includes storing additional instances of the received stream as demand for the content increases.

7. (Original) The method of claim 1 wherein using the duplicating switch to store content includes storing content and associated header information.

8. (Original) The method of claim 1 wherein using the duplicating switch to store content includes storing a checksum describing the content.

Applicant : Gil Weigand et al.  
Serial No. : 10/090,727  
Filed : March 6, 2002  
Page : 4 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

9. (Currently Amended) The method of claim 1 wherein at least one of the ~~forwarded~~~~second~~ streams is transmitted in response to receiving ~~the~~a request from a terminal.

10. (Currently Amended) The method of claim 1 wherein the ~~forwarded~~~~second~~ streams ~~are~~ is transmitted in response to receiving ~~the~~a request from a service provider.

11. (Currently Amended) The method of claim 1 wherein:  
storing the content includes using location identifiers to track simultaneous transmissions of a single stored instance of ~~the received~~a stream, and  
~~forwarding~~~~transmitting~~ includes transmitting the different data units ~~from~~ within the single stored instance to several requestors who have terminals receiving the ~~forwarded~~ streams that overlap but differ by a time differential.

12. (Currently Amended) The method of claim 1 wherein the duplicating switch is a specialized device including hardware configured to perform one or more of receiving a ~~received~~~~first~~ stream of data units, storing content from the ~~received~~~~first~~ stream, generating ~~forwarded~~~~second~~ streams, and making the ~~forwarded~~~~second~~ streams available.

13. (Currently Amended) A duplicating switch comprising:  
means for using a duplicating switch to receive communications;  
means for using the duplicating switch to selectively filter the communications;  
means for receiving a ~~received~~~~first~~ stream of data units that ~~is~~are addressed to a unicast address ~~associated with~~the duplicating switch, wherein the ~~first stream~~of data units includes a payload portion and an attribute portion;  
means for storing content from ~~the payload portion of the received~~~~first~~ stream;  
~~generating~~ means for generating ~~forwarded~~~~second~~ streams that incorporate the stored content for use by two or more terminals having addressing information that was not part of the

Applicant : Gil Weigand et al.  
Serial No. : 10/090,727  
Filed : March 6, 2002  
Page : 5 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

~~received first stream, the generating means being configured to duplicate one or more portions of the first stream; and~~

~~means for using the duplicating switch to forward the duplicated payload portion of the data unit within the forwarded second streams of data units that incorporates the content, each forwarded stream being forwarded to a unicast address, addressed to a unicast address on each of the two or more terminals in response to a request received at the duplicating switch,~~

~~wherein the duplicating switch is structured and arranged to selectively filter the communications and forward the forwarded streams based on address information sent in the request to the duplicating switch duplicated portion in response to examining an address.~~

14. (Original) The duplicating switch of claim 13 wherein means for storing content includes means for storing content that is temporally related to the data units that are being generated.

15. (Currently Amended) The duplicating switch of claim 14 further comprising means for using a location identifier to indicate which portion of content is being generated into the ~~forwarded second~~ streams.

16. (Original) The duplicating switch of claim 15 further comprising means for using location identifiers to access the content time-shifted as two different streams.

17. (Original) The duplicating switch of claim 13 wherein means for storing content includes means for storing more than one instance of the same portion of content.

18. (Original) The duplicating switch of claim 17 wherein means for storing content includes means for storing additional instances of the stream as demand for the content increases.

Applicant : Gil Weigand et al.  
Serial No. : 10/090,727  
Filed : March 6, 2002  
Page : 6 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

19. (Original) The duplicating switch of claim 13 wherein means for storing content includes means for storing content and associated header information.

20. (Original) The duplicating switch of claim 13 wherein means for storing content includes means for storing a checksum describing the content.

21. (Currently Amended) The duplicating switch of claim 13 wherein the means for ~~generating~~making the forwarded~~second~~ streams available include means for transmitting at least one of the forwarded~~second~~ streams in response to receiving the~~a~~ request from a terminal.

22. (Currently Amended) The duplicating switch of claim 13 wherein the forwarded~~second~~ stream is transmitted by the means for making it available in response to receiving the~~a~~ request from a service provider.

23. (Currently Amended) The duplicating switch of claim 13 wherein:  
means for storing the content includes means for using location identifiers to track simultaneous transmissions of a single stored instance of the received~~a~~ stream, and  
means for transmitting includes means for transmitting the different data units from within the single stored instance to several requestors who have terminals receiving the forwarded stream that overlap but differ by a time differential.

24. (Currently Amended) The duplicating switch of claim 13 wherein the generating means include a specialized device including hardware configured to perform one or more of receiving a received~~first~~ stream of data units, storing content from the received~~first~~ stream, generating forwarded~~second~~ streams, and making the forwarded~~second~~ streams available.

25. (Currently Amended) A duplicating switch comprising:  
a first communications interface structured and arranged to:

Applicant : Gil Weigand et al.  
Serial No. : 10/090,727  
Filed : March 6, 2002  
Page : 7 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

receive communications,  
selectively filter the communications, and  
receive a received first stream of data units that are addressed to a unicast address associated with ~~on~~ the duplicating switch, wherein each data unit includes a payload portion and an attribute portion;  
a storage processor structured and arranged to store content from the payload portion of the received first stream;  
a switching processor structured and arranged to generate forwarded ~~second~~ streams that incorporate the ~~stored~~ content for use by two or more terminals having addressing information that was not part of the received first stream, ~~the switching processor being configured to duplicate one or more portions of the first stream;~~ and  
a second communications interface structured and arranged to forward the forwarded streams that incorporate the content duplicated payload portion of the data unit within the second streams of data units addressed to a unicast address on each of the two or more terminals in response to a request received at the duplicating switch, each forwarded stream being forwarded to a unicast address,  
wherein the duplicating switch is structured and arranged to selectively filter the communications and forward the forwarded stream ~~duplicated payload portion based on address information sent in the request to the duplicating switch~~ ~~response to examining an address.~~

26. (Original) The duplicating switch of claim 25 wherein the storage processor is structured and arranged to store content that is temporally related to the data units that are being generated.

27. (Currently Amended) The duplicating switch of claim 26 further comprising a first memory processor structured and arranged to use a location identifier to indicate which portion of content is being generated into the forwarded ~~second~~ streams.

Applicant : Gil Weigand et al.  
Serial No. : 10/090,727  
Filed : March 6, 2002  
Page : 8 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

28. (Original) The duplicating switch of claim 27 further comprising a second memory processor structured and arranged to use location identifiers to access the content time-shifted as two different streams.

29. (Original) The duplicating switch of claim 25 wherein storage processor is structured and arranged to store more than one instance of the same portion of content.

30. (Currently Amended) The duplicating switch of claim 29 wherein the storage processor is structured and arranged to store additional instances of the received stream as demand for the content increases.

31. (Original) The duplicating switch of claim 25 wherein the storage processor is structured and arranged to store content and associated header information.

32. (Original) The duplicating switch of claim 31 wherein the storage processor is structured and arranged to store a checksum describing the content.

33. (Currently Amended) The duplicating switch of claim 25 wherein the second communications interface is structured and arranged to make at least one of the forwardedsecond streams available in response to receiving thea request from a terminal.

34. (Currently Amended) The duplicating switch of claim 25 wherein the forwardedsecond stream is transmitted by the second communications interface in response to receiving thea request from a service provider.

35. (Currently Amended) The duplicating switch of claim 25 wherein:  
the storage processor is structured and arranged to use location identifiers to track simultaneous transmissions of a single stored instance of the receiveda stream, and

Applicant : Gil Weigand et al.  
Serial No. : 10/090,727  
Filed : March 6, 2002  
Page : 9 of 10

Attorney's Docket No.: 06975-214001 / Ultravox 05

the second communications interface is structured and arranged to transmit the different data units from within the single stored instance to several requestors who have terminals receiving the forwarded streams that overlap but differ by a time differential.

36. (Currently Amended) The duplicating switch of claim 25 wherein the switching processor is a specialized device including hardware configured to perform one or more of receiving a received~~first~~ stream of data units, storing content from the received~~first~~ stream, generating forwarded~~second~~ streams, and making the forwarded~~second~~ streams available.